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#### UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte JANG GEUN OH

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Appeal 2008-4287 Application 10/621,369 Technology Center 2600

Decided: November 13, 2008

Before MAHSHID D. SAADAT, JOHN A. JEFFERY, and KARL D. EASTHOM, *Administrative Patent Judges*.

JEFFERY, Administrative Patent Judge.

#### **DECISION ON APPEAL**

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 28, 30-41, and 47-50. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM-IN-PART.

#### STATEMENT OF THE CASE

Appellant invented a method for controlling the brightness of a LCD based on the sensed brightness. The manufacturer sets the initial brightness information (e.g., brightness level, control code, and inverter power) for the LCD and stores the values in the memory of the LCD. This information is monitored and adjusted, if necessary. If the information is updated, a code table is adjusted. The technique reduces unnecessary power consumption of the display. Independent claim 28 is reproduced below:

28. A method of setting brightness control codes of a display, comprising:

driving the display;

sensing a brightness of the display;

adjusting the driving of the display until the display is driven at a predetermined brightness based on the sensed brightness; and

setting an adjusted brightness control code corresponding to the predetermined brightness of the display, wherein the driving includes initially driving the display using a brightness control code provided by a display manufacturer, and wherein setting the adjusted brightness control code includes setting a new brightness control code corresponding to the predetermined brightness, the new brightness control code replacing the brightness control code provided by the display manufacturer.

The Examiner relies upon the following as evidence in support of the rejection:

Ichise	US 5,786,801	Jul. 28, 1998
Mendelson	US 6,559,826 B1	May 6, 2003

(1) The Examiner rejected claims 28, 30-41, and 50 under 35 U.S.C. § 102(e) as anticipated by Mendelson.

<sup>&</sup>lt;sup>1</sup> See generally Spec. ¶¶ 11, 12, 15, 34, 36, 37, and 42-52.

(2) The Examiner rejected claims 47-49 under 35 U.S.C. § 103(a) as unpatentable over Mendelson and Ichise.

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs<sup>2</sup> and the Answer<sup>3</sup> for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments, which Appellant could have made but did not make in the Briefs, have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

#### REJECTION OF MENDELSON

We first turn to the rejection of claims 28, 30-41, and 50 under 35 U.S.C. § 102(e) as being anticipated by Mendelson. Appellant argues each claim on appeal separately. Accordingly, we address independent claim 28 and its dependent claims 30-35, 40, 41, and 50 first. Then, we will discuss independent claim 36 and its dependent claims 37-39.

## Claims 28, 30-35, 40, 41, and 50 Claim 28

The Examiner finds that Mendelson discloses all the recited elements of independent claim 28 (Ans. 4-6). Appellant argues that Mendelson does not disclose the step of "adjusting the driving of the display until the display is driven at a predetermined brightness based on the sensed brightness" or "setting an adjusted brightness control code corresponding to the

<sup>&</sup>lt;sup>2</sup> We refer to the Appeal Brief filed August 22, 2007, and the Reply Brief filed December 28, 2007, throughout this opinion.

<sup>&</sup>lt;sup>3</sup> We refer to the Examiner's Answer mailed November 1, 2007, throughout this opinion.

predetermined brightness of the display" as recited in claim 28 (App. Br. 7-9; Reply Br. 3-6).

#### **ISSUES**

The following issues have been raised in the present appeal:

- (1) Does Mendelson disclose adjusting the display to a predetermined brightness based on a sensed brightness?
- (2) Does Mendelson disclose setting an adjusted brightness control code to correspond to the predetermined brightness?

#### FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

- 1. Mendelson discloses driving a LCD with various color images at different brightness levels or intensities<sup>4</sup> (i.e., settings 1, 2, 3, and 4) at steps 1115, 1120, 1125, and 1130. Steps 1115, 1120, 1125, and 1130 include measuring the luminance outputs with a sensor (Mendelson, col. 11, ll. 47-65 and col. 15, ll. 19-45; Fig. 11).
- 2. The outputs in Mendelson are used to calculate luminance ratios, which are stored in a memory device of the LCD, or absolute luminance values (col. 15, ll. 33-35, 38-40, 43-45, and col. 15, l. 53 col. 16, l. 3).

<sup>&</sup>lt;sup>4</sup> As Table 2 does not exist, the reference to light-source intensity levels "as shown in Table 2" (Mendelson, col. 15, ll. 33-35, 38-40, and 43-45) was a typographical error and should have been Table 1.

- 3. A table is constructed from the ratios and correlates voltage settings of the lamps, the brightness of the display, and the color temperature to the different levels (Mendelson, col. 13, 11. 26-28 and col. 15, 1. 53 col. 16, 1. 6; Fig. 11).
- 4. An updated reference profile for the LCD includes the table and replaces the previously stored reference profile stored in memory (Mendelson, col. 16, 11. 7-11).
- 5. Once updated, Mendelson discloses the display is recalibrated using the new profile to compensate for the loss of brightness due to lamp degradation. This updated preference also acts as a reference point in subsequent calibrations and adjustments (Mendelson, col. 16, ll. 10-13 and 17-20).
- 6. Driving the display is adjusted to the voltage setting and brightness found in the constructed table (Mendelson, col. 15, ll. 53-64 and col. 16, ll. 3-6 and 17-20; Fig. 11).
- 7. Mendelson teaches that process 1100 can occur at any time during the display's service life, and the updated profile is used in subsequent calibrations (Mendelson, col. 15, ll. 6-12 and col. 16, ll. 10-13; Fig. 11).
- 8. Mendelson discloses the inverter circuitry 570 controls the light sources and allows for independent dimming control of the lights (Mendelson, col. 9, 11. 13-20 and 29-32; Fig. 6).
- 9. Mendelson discloses a memory device 595 for storing a monitor specific reference profile and VESA EDID information (Mendelson, col. 9, 1. 66 col. 10, 1. 13; Fig. 7).

- 10. Mendelson states the first memory 595a is programmed to store EDID information, and the second memory 595b is programmed to store monitor-specific reference profile (Mendelson, col. 10, ll. 45-52; Fig. 7).
- 11. Mendelson states an update reference profile is stored within the EDID memory (Mendelson, col. 16, ll. 7-10).
- 12. Mendelson discloses the format of the monitor specific reference profile is arbitrary. Exemplary formats include a manufacturer's proprietary format and the International Color Consortium profile format (Mendelson, col. 13, 11. 28-32).
- 13. Mendelson sets the new profile, including voltage settings and brightness, by updating the values provided by the display manufacture<sup>5</sup> (Mendelson, col. 15, 1. 53 col. 16, 1. 17; Fig. 11).
- 14. The Specification states the control codes are set to as arbitrary values (Spec. 8:7-9).

#### PRINCIPLES OF LAW

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Moreover, during examination of a patent application, a claim is given its broadest reasonable construction "in light of the

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<sup>&</sup>lt;sup>5</sup> While Mendelson discusses the nascent characteristics, such as the tristimulus values of each lamp are not replaced (Mendelson, col. 16, ll. 13-16), Mendelson discloses the updated profile with the voltage and brightness values are replaced (Mendelson, col. 16, ll. 7-13).

specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

#### **ANALYSIS**

Appellant argues Mendelson discloses storing luminance ratios in a memory device in order to construct a table of updated reference profile information and does not disclose the updated information in the table is "an adjusted brightness control code corresponding to the predetermined brightness" recited in claim 28 (App. Br. 7). Specifically, Appellant asserts that the discussion regarding constructing a table that correlates the voltage settings of the lamps, the brightness of the display, and the color temperature of the display in Mendelson does not disclose a control code corresponding to a predetermined brightness (App. Br. 7-8). Appellant also argues that the luminance ratios are used to adjust the contribution of the red, blue, and green intensity and not to set an adjusted brightness code corresponding to a predetermined brightness (App. Br. 8).

During examination of a patent application, a claim is given its broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." *Am. Acad.*, 367 F.3d at 1364. The Specification does not define the term, "brightness" nor has Appellant provided any evidence that the term has a particular meaning to those of ordinary skill in the art. We will, therefore, construe "brightness" as having its ordinary and customary meaning. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citations omitted). Merriam-

Webster's Online Dictionary<sup>6</sup> defines "brightness" as "1 a: the quality or state of being bright; *also*: an instance of such a quality or state b: LUMINANCE." Thus, the terms, luminance and brightness, are synonymous, and any reference to luminance in Mendelson is also a reference to brightness.

Moreover, the Specification does not define the phrase, "brightness control code," nor has Appellant provided evidence that the phrase has a particular meaning to those skilled in the art. In fact, the Specification states the control code can be set to any arbitrary value (FF 14). Additionally, "[t]hough understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). Thus, giving the phrase, "brightness control code," its broadest reasonable construction and without importing into claim 28 limitations that are not recited, we construe "brightness control code" to mean a code or value that controls the brightness of the display.

Mendelson discloses driving a LCD with various color images at different brightness levels at steps 1115, 1120, 1125, and 1130 (FF 1). These steps also include measuring the brightness outputs with a sensor (*Id.*). The sensed outputs are used to calculate brightness ratios from the

<sup>&</sup>lt;sup>6</sup> Merriam-Webster's Online Dictionary, 11th ed., *available at* http://www.merriam-webster.com/dictionary/brightness (last visited Sept. 30, 2008).

different settings in Table 1, and these values are stored in the memory of the LCD (FF 2). A table is constructed from the ratios and correlates the voltage settings of the lamps, the brightness of the display, and the color temperature of the display to these ratios calculated from the sensed brightness output (FF 1, FF 3). An updated reference profile for the LCD, which includes the table and its corresponding voltage settings, brightness, and color temperature, is also stored in memory and replaces the previous stored reference profile (FF 3, FF 4). Thus, the table includes the brightness of the display, which is based on or determined by the initially sensed brightness outputs. This brightness is also separate from color temperature values that Appellant argues are used for adjustment (App. Br. 8). As the brightness of the display is determined by the sensed brightness output, the brightness is also predetermined.

Additionally, the table includes the voltage settings of the lamps that correspond to a predetermined brightness of the display and control the intensity of the lamps. Since the voltage setting in the table corresponds to and controls the intensity or brightness of the display, each voltage setting is a brightness control code. Thus, in contrast to Appellant's assertion (App. Br. 9), Mendelson discloses setting an adjusted brightness control code or voltage setting corresponding to a predetermined brightness of the display based on the sensed brightness and replaces these values with the manufacturer-provided codes (FF 4).

Furthermore, once the codes or voltages are updated, Mendelson discloses the display is recalibrated using the profile, including the brightness of the display, to compensate for the loss of brightness due to lamp degradation (FF 5). That is, the driving of the display is not only

adjusted to a voltage setting, as Appellant asserts (App. Br. 8-9), but also performed at a predetermined brightness (FF 6). As explained above, this brightness is predetermined and based on the sensed brightness. Additionally, giving the claim construction of the phrase, "until the display is driven at a predetermined brightness," its broadest reasonable interpretation, there is no requirement the adjustment be an iterative process, as Appellant contends (App. Br. 9; Reply Br. 3). The adjustment of the driving to a predetermined brightness can be achieved in a single step. Mendelson, thus, disclose the step of "adjusting the driving of the display until the display is driven at a predetermined brightness based on the sensed brightness," as recited in claim 28.

Lastly and contrary to Appellant's position (Reply Br. 5), we also find that the "adjusting the driving of the display" step need not be performed prior to the "setting an adjusted brightness control code" step as recited in claim 28. See Altiris Inc. v. Symantec Corp., 318 F.3d 1363, 1371 (Fed. Cir. 2003). Claim 41, which depends from independent claim 28, recites "setting the brightness control code occurs after adjusting the driving of the display." Thus, Appellant clearly envisioned a broader interpretation of claim 28 than to require the adjusting and setting steps of claim 28 to occur in any specific order. It is well settled that "[t]he presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim." Acumed LLC v. Stryker Corp., 483 F.3d 800, 806 (Fed. Cir. 2007) (quoting Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed. Cir. 2004)). Thus, under the doctrine of claim differentiation, we presume that the adjusting and setting steps of claim 28 are not required to be performed in a particular order. To do otherwise

would render claim 41 identical in scope to claim 28 and, therefore, superfluous.

For the above reasons, Appellant has not shown the Examiner erred in rejecting claim 28 under 35 U.S.C. § 102(e) based on Mendelson.

#### Claim 30

Claim 30 recites "the driving, sensing, adjusting and setting are performed a plurality of times." The Examiner finds that Mendelson discloses this limitation (Ans. 6). Appellant argues that Figure 11 and the steps merely display images at various levels but not a plurality of times (App. Br. 17). We find that the Examiner has erred for the following reasons.

As explained, Mendelson discloses adjusting the driving of the display or recalibrating the display after setting the adjusted brightness control code (FF 5, FF 6). This adjustment is done once at the end of the profile updating process (*Id.*). Mendelson, therefore, does not disclose the adjusting is "performed a plurality of times to set a plurality of different brightness control codes" as recited. While Mendelson suggests that process 1100 may occur more than once (FF 7), there is no explicit disclosure in Mendelson that the adjusting step is performed a number of times. We are, therefore, constrained to find that Mendelson fails to disclose all the limitations of claim 30.

For the above reasons, Appellant has shown the Examiner erred in rejecting claim 30 based on Mendelson. Accordingly, we will not sustain the rejection of claim 30.

#### Claims 31-34

Claims 31-34 depend from claim 30. As explained above, Mendelson does not disclose all the limitations found in claim 30. We, therefore, likewise find that Mendelson does not disclose the limitations recited in claims 31-34.

For the above reasons, Appellant has shown the Examiner erred in rejecting claims 31-34 based on Mendelson.

#### Claim 35

Claim 35 recites the "adjusting comprises changing a signal applied to an inverter that supplies power to the display to adjust a brightness of the display." The Examiner finds that Mendelson teaches all the recited elements (Ans. 7). Appellant asserts the cited portions of Mendelson "do not relate to adjusting the driving until the display is driven at a predetermined brightness by changing the signal applied to the inverter" (App. Br. 13-14).

Apart from merely asserting that these limitations are not found in Mendelson, Appellant does not specifically address the Examiner's specific positions articulated in the Answer or explain why these positions are deficient. Merely pointing out what a claim recites is not considered an argument for separate patentability of the claim. 37 C.F.R. § 41.37(c)(1)(vii). In any event, Mendelson discloses the inverter circuitry 570 is used to control the light sources (FF 8). In particular, Mendelson discloses the circuitry 570 allows for independent dimming control of the lights (*Id.*). Controlling the dimming or brightness of lights necessarily involves adjusting the signal applied to the inverter. Thus, Mendelson

discloses the step of adjusting the signal applied to the inverter that supplies power to the display in order to adjust the brightness.

For the above reasons, Appellant has not shown the Examiner erred in rejecting claim 35 based on Mendelson.

#### Claim 40

Claim 40 recites "the new brightness control code is provided in EDID format." The Examiner finds that Mendelson teaches all the recited elements (Ans. 8). Appellant argues Mendelson discloses the updated information is stored in another profile or memory 595b (App. Br. 14).

Mendelson discloses various memory areas for storing display information. These sections refer only to the part of the memory that stores information and not the format. With respect to the format of the monitor specific reference profile, including the table that contains brightness control codes, Mendelson disclose the format is arbitrary (FF 12). Exemplary formats include a manufacturer's proprietary format and the International Color Consortium profile format (*Id.*). However, none of these passages disclose the brightness control code is in an EDID format.

For the above reasons, Appellant has shown the Examiner erred in rejecting claim 40 based on Mendelson.

#### Claim 41

Claim 41 recites "setting the brightness control code occurs after adjusting the driving of the display." The Examiner finds that Mendelson teaches all the recited elements (Ans. 8). Appellant states Mendelson does

not suggest setting the brightness control code after adjusting the driving of the display (App. Br. 15). We agree with Appellant.

As discussed above with respect to the doctrine of claim differentiation, claim 28 permits a broad interpretation in which the adjusting and setting steps are not required to be performed in a particular order. In contrast, claim 41 requires that the adjusting the driving of the display step occurs prior to the setting the brightness control code step. Mendelson does not disclose the steps of driving and setting occur in this particular order. Mendelson discloses driving the display at a brightness level at steps 1115, 1120, 1125, and 1130 (FF 1). These brightness levels may even be considered predetermined but are not based on a sensed brightness as required by claim 28. Additionally, as explained previously with regard to claim 28, driving the display at a predetermined brightness that is based on the sensed brightness happens during recalibration (FF 5, FF 6). Thus, the setting step in Mendelson occurs not after, but before adjusting the driving of the display, as claimed.

For the above reasons, Appellant has shown the Examiner erred in rejecting claim 41 based on Mendelson.

#### Claim 50

Claim 50 recites "driving the display using the new brightness control code." The Examiner finds that Mendelson teaches all the recited elements (Ans. 9). Appellant repeats the argument that Mendelson discloses the updated reference profile includes luminance ratios and not updated brightness control codes (App. Br. 17). We, however, disagree for the reasons previously discussed in connection with claim 28.

For the above reasons, Appellant has not shown the Examiner erred in rejecting claim 50 based on Mendelson.

#### Claims 36-39

We next address independent claim 36 and its dependent claims 37-39.

#### Claim 36

Independent claim 36 is similar in scope to dependent claim 30. Both recite repeating the driving, sensing, adjusting, and setting steps a plurality of times to set a plurality of different brightness control codes. The Examiner finds that Mendelson teaches all the recited elements (Ans. 7-8). Appellant repeats the arguments made with regard to claim 28 and adds that Mendelson does not disclose driving, sensing, adjusting, and setting to a plurality of control codes corresponding to different predetermined brightness (App. Br. 19). We are persuaded by Appellant's arguments for the reasons previously discussed in connection with claim 30.

For the above reasons, Appellant has shown the Examiner erred in rejecting claim 36 based on Mendelson.

#### Claims 37-39

Claims 37-39 depend from claim 36. As explained above, Mendelson does not disclose all the limitations found in claim 36. We, therefore, likewise find that Mendelson does not disclose all the limitations founds in claims 37-39.

For the above reasons, Appellant has shown the Examiner erred in rejecting claims 37-39 based on Mendelson.

#### REJECTION OF MENDELSON AND ICHISE

We next turn to the rejection of claims 47-49 under 35 U.S.C. § 103(a) as being unpatentable over Mendelson and Ichise. Since Appellant argues each claim on appeal separately, we will address each claim.

#### Claim 47

The Examiner finds that the combination of Mendelson and Ichise teaches all the recited elements of claim 47 (Ans. 10-11). Appellant argues the cited portions of Ichise do not relate to brightness control code and that there is no suggestion to combine Ichise with Mendelson (App. Br. 15-16; Reply Br. 6-7).

#### **ISSUES**

The following issues have been raised in the present appeal:

- (1) Does the combination of Mendelson and Ichise teach or suggest increasing the new brightness control code by one?
- (2) Has Appellant shown that there is no suggestion or teaching in Ichise to combine with Mendelson?

#### PRINCIPLES OF LAW

Discussing the question of obviousness of a patent that claims a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. AG Pro, Inc., 425 U.S. 273 (1976)] and Anderson's-Black Rock[, Inc. v. Pavement Salvage Co., 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

KSR, 127 S. Ct. at 1740.

If the Examiner's burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

#### **ANALYSIS**

Claim 47 recites "setting the new brightness control code includes increasing by 1 the brightness code provided by the display manufacture." As explained above with respect to claim 28, Mendelson sets the new brightness control code by updating the reference profile values provided by the display manufacture, including voltage settings (FF 13). Mendelson, therefore, teaches or suggests the voltage settings will be adjusted accordingly in the reference profile for the monitor. Thus, one skilled in the art would have recognized that if the sensed brightness increases by one from the reference point, the brightness code or voltage setting would

accordingly be increased by one. This yields no more than one would expect from such an arrangement and predictably results in setting a new control code by increasing the code by one. *KSR*, 127 S. Ct. at 1739-40. Moreover, the Specification describes the value or amount of the brightness control code as arbitrary (FF 14). Additionally, Mendelson discloses the values used to construct the table include voltage settings at different brightness settings shown in Table 1 (FF 1-FF 3). One of ordinary skill in the art would have, therefore, further recognized that the values at the different settings (e.g., from setting 1 to setting 2) need to be distinguished by one brightness setting or by increasing or adjusting the code by one. This yields a predictable result of distinguishing the values of one setting from another.

Since Mendelson teaches and suggests the setting step in claim 47, we find that Ichise is cumulative and unnecessary for the proposed modification.

For the above reasons, Appellant has not shown the Examiner erred in rejecting claim 47 based on the collective teachings of Mendelson and Ichise.

#### Claim 48

Claim 48 recites "setting the new brightness control code includes decreasing by 1 the brightness code provided by the display manufacture." The Examiner finds that the combination of Mendelson and Ichise teaches all the recited elements (Ans. 10-11). Appellant argues the values disclosed in Ichise do not relate to brightness control codes (App. Br. 16-17).

We hereby incorporate the discussion of claim 47. Similar to the above rationale, if the sensed brightness decreases in value from its

predecessor, one skilled in the art would have recognized that the voltage settings or codes would be accordingly decreased. For example, the voltage settings or codes will be decreased by one when the sensed brightness decreases by one from the reference point. According to the *KSR* holding, this yields no more than one would expect from such an arrangement and predictably results in setting a new control code by decreasing the code by one. Additionally, one of ordinary skill in the art would have further recognized that the values at the different settings (e.g., from setting 2 to setting 1) need to be distinguished by one brightness setting or by decreasing or adjusting the code by one. This also yields a predictable result of distinguishing the values of one setting from another.

Since Mendelson teaches and suggests the setting step in claim 48, we also find that Ichise is cumulative and unnecessary for the proposed modification.

For the above reasons, Appellant has not shown the Examiner erred in rejecting claim 48 based on the collective teachings of Mendelson and Ichise.

#### Claim 49

Claim 49 depends from claim 36. As explained above, Mendelson does not disclose all the limitations found in claim 36. We, therefore, find that Mendelson does not disclose all the limitations founds in claim 49. Moreover, Ichise does not cure the deficiencies of Mendelson.

For the above reasons, Appellant has shown the Examiner erred in rejecting claim 49 based on the combination of Mendelson and Ichise.

#### **CONCLUSION**

- (1) For the foregoing reasons, Appellant has not shown the Examiner erred in finding that Mendelson discloses the limitations found in claims 28, 35, and 50 or the combination of Mendelson and Ichise teaches all the limitations of claims 47 and 48.
- (2) For the foregoing reasons, Appellant has shown the Examiner erred in finding Mendelson discloses the limitations found in claims 30-34, 36-41 or the combination of Mendelson and Ichise teaches all the limitations found in claim 49.

#### **DECISION**

We have sustained the Examiner's rejection of claims 28, 35, 47, 48, and 50 and reversed the Examiner's rejections with respect to claims 30-34, 36-41, and 49. Accordingly, the Examiner's rejection of claims 28, 30-41, and 47-50 is affirmed-in-part.

No period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

## AFFIRMED-IN-PART

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